### **Waste Prevention**

Although nearly everyone is familiar with recycling, few people have looked seriously at waste prevention, also called source reduction. Think about it. If you don't create waste, you don't have to store, collect, and haul it to a landfill. Waste prevention also saves resources by encouraging more efficient use of materials, and it reduces pollution associated with extracting raw materials, manufacturing excess items, and disposing of waste. So by practicing waste prevention, you can help the environment and cut costs simultaneously.

If waste prevention is so beneficial, then why aren't more people practicing it? The answer is easy. We are all used to doing things a certain way, and preventing waste means we have to make changes. Purchasing more durable products and items with less packaging, and repairing and reusing items are the types of changes that reduce waste. To find out where waste prevention opportunities exist in your school district, ask these basic questions:

 Where can we eliminate or reduce the amount or toxicity of material we use?

 Are there other products we could purchase that are more repairable, refillable, reusable, or durable than ones we are currently using?

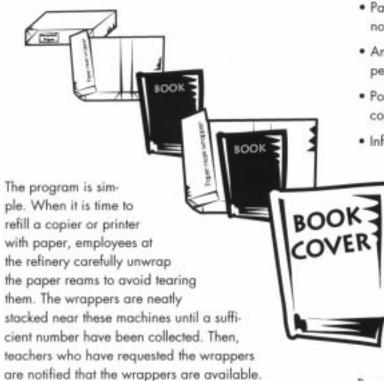
- Are there products that come without packaging or with less packaging?
- Are there yard trimmings or other organic materials that could be composted?

There are many different levels of waste prevention. It is an ongoing process to find better ways to utilize our resources efficiently through waste prevention, thereby creating less waste. Clearly, there are trade-offs that must be considered. Typically these trade-offs focus on time and labor, storage needs, cost of alternative equipment and supplies, and local health and safety requirements. Listed on the next page are examples of waste prevention. Hopefully these will help you think of ideas for your class-room, school, and district!

Reusable School News (the News) is published by the California Integrated Waste Management Board (CIWMB), the agency responsible for overseeing the development and implementation of a statewide integrated waste management program. CIWMB provides technical assistance and resource information to school districts in developing waste prevention and recycling programs. The News highlights case studies showcasing the economic and environmental benefits of establishing a district-wide waste reduction program. It is being sent to local governments, school districts, schools and other interested parties. For more information, call the Schools Section at (916) 255-2296.

# Reuse the Wrapper!!

Waste prevention at Chevron's El Segundo Refinery includes a program to put **paper ream wrappers** (packaging that wraps 500 sheet paper bundles) to good use. Chevron donates the durable kraft paper wrappers to teachers, who offer them to students to cover their books.



Lani Marshall, of the refinery's Public Affairs Office, estimates that 15,000 of the ream wrappers are generated monthly at the refinery. The wrappers are unacceptable in the refinery's mixed paper recycling program and, until recently, were thrown away. Though the program is only a small part of Chevron's waste prevention efforts, it exemplifies a creative approach to waste prevention.

Are paper reams at your school or district wrapped in kraft paper? Why not introduce a similar program at your school? Likely, there are teachers or students who could put the wrappers to good use.

#### Here are a few reasons to introduce such a program:

· Waste prevention is illustrated to students.

- Material might otherwise be discarded.
- Wrappers no longer overflow from trash cans near copiers and printers, making the office look nicer and reducing the frequency these cans must be emptied.
- Covers help protect textbooks, making them last longer.

#### In starting a program, keep in mind:

- Paper reams need to be unwrapped carefully—do not tear the wrapper.
- Announce the program on the blank side of a wrapper.
- Post announcements explaining your efforts near copiers and printers.
- Inform teachers and students of the book covers.
  - Add a new cover over a worn one.
     Together they will protect the book better.

# Going The Extra Mile

With budgets tightening, educators are turning toward creating innovative public/private partnerships. Mary Burgess, who teaches in Escondido Elementary School District, San Diego County, embarked on a campaign to solicit donations from local businesses. Burgess developed a "Reduce,

Reuse, Recycle" flyer explaining the need she had for scrap materials. She distributed the flyer to local businesses and waited for responses.

Feedback did not take long. Burgess received donations from a variety of businesses. One contact, a wall-paper store, donated leftover pieces of wallpaper. Burgess folded the wallpaper in half, inserted reused paper, and bound the books with a few staples—now her students have fancy journals. A local print shop which cannot use the paper at the end of the paper rolls donated piles of "clean" white paper in different sizes. The paper fills a variety of classroom uses, including language arts and mathematics assignments. If you would like additional ideas on how to reuse materials, contact the Schools Section, (916) 255-2296, and we will send you a copy of **Seeing Green Through Waste Prevention.** 

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## The How-to Guides are Here!

Over the past year the California Integrated Waste Management Board (Board) has spent a great deal of time assisting school districts and local governments in implementing waste prevention and recycling programs. Based upon the results of these projects and other existing model programs, the Board has developed two how-to guides, which are now available.

The first guide, **\$eeing Green Through Waste Prevention**, provides extensive information for developing a district-wide waste prevention

program. Waste prevention saves resources by encouraging more efficient use of materials; and it reduces pollution associated with extracting raw materials, manufacturing excess items, and disposing waste. By including a waste prevention program in the district's resource conservation plan, you can help the environment and cut costs simultaneously. This guide outlines steps, such as waste composition surveys, waste prevention ideas/activities, and cost analysis, you will need to undertake in establishing a comprehensive program.

The second guide, A DistrictWide Approach to Recycling,
supplies detailed information necessary for implementing a recycling
program covering the entire district.
The data in this guide is supplemented
with case studies based on other districts' experiences.
The guide focuses on the economic benefits of a district-wide program. Topics covered include organizing
key players, securing hauling arrangements, and training staff and students.

These guides are available at no charge. To receive a copy, contact the Schools Section, (916) 255-2296.

# Waste Prevention Ideas for the Classroom

This list of waste prevention ideas from other schools/districts is intended to help you jump start your waste prevention efforts. Reduce paper use whenever possible:

- Allow students to submit homework on the back side of used paper.
- · Duplicate handouts using both sides of paper.



- Approach your school administrators about purchasing a copy machine that makes duplex copies, if your current copier doesn't.
- Avoid printing extra handouts.
- Keep a box for various types of scratch papers (single-sided, construction, etc.).
- · Bind scrap paper to use for taking notes.
- Maximize use of overhead projector and blackboard to minimize use of dittoed information.

- Place worksheets in plastic sleeves. Have students write with crayon and erase with carpet squares.
- Use erasable lap boards for classroom work.
- Place wall decoration directly on walls or bulletin boards without paper linings. Reuse wall decorations or exchange them with other teachers.
- Collect scraps of construction paper, fabric, wood, and other items to use for projects. Ask local businesses to donate materials they intend to discard or provide a list of wanted items. Also, some communities have materials exchanges for art supplies where schools can get cheap or free materials. Contact your county or city recycling coordinator for information. Also contact CALMAX™, California's material exchange program, to learn about free or low-cost materials that may be available in your area. To order a catalog at no cost, contact the California Integrated Waste Management Board, (916) 255-2369.
- Start up special projects that reduce waste inside or outside the classroom.
- Write letters to manufacturers asking them to use less packaging and design products that are more durable, repairable, and reusable.
- Designate a "no-waste day" to see how much waste can be reduced. Teach students how to bring a no-waste lunch.
- Investigate the feasibility of composting yard debris and cafeteria fruit and vegetable trimmings.
- · Set up a worm bin in the classroom.
- Conduct a waste prevention poster contest. Specify that posters must be made from used materials.
- Brainstorming with others is bound to result in more ideas!
- Educate students on waste prevention issues and options. The California Integrated Waste Management Board has supplementary materials which you can use in your classroom.

(Adapted from Seeing Green Through Waste Prevention, A Guide for School Districts.)

## **Rural Resourcefulness**

he remote, often dispersed nature of rural communities raises unique barriers in developing recycling programs. One strategy to increase the feasibility of establishing recycling programs in rural areas is to organize cooperative marketing programs. Bringing resources together from different sectors of the community can improve marketing of collected recyclables and reduce administrative costs. Using this strategy, the Palo Verde Unified School District (PVUSD) is participating in a program organized by the City of Blythe.

Blythe, PVUSD, Chuckawalla Valley State Prison, and Palo Verde Valley Disposal are participating in a cooperative effort to collect and process recyclables. The program combines recyclables collected from PVUSD's 4,000+ students with similar materials generated by 4,000+ inmates and employees at the prison. At present, the materials targeted for recycling are milk cartons, juice boxes, cardboard, and computer and white paper.

Blythe's Assistant Public Works Director, Jim Rodkey, provided key leadership in putting the program and participants together. For his efforts in getting the program started, Jim received the Individual Recycling Award by the County of Riverside Board of Supervisors. Mr. Rodkey is quick to point out that the program would not be possible without the tremendous cooperation of the prison, school district, and waste hauler. Support from the community, city council, and City Manager Les Nelson has also played a key role.

The school district has three elementary schools, one middle school and two high schools. Each school decides how it will carry out the recycling program. All of the recyclables collected at the individual school sites go to Palo Verde High School, where they are collected in three forty-cubic-yard bins. The local waste hauler, Palo Verde Valley Disposal (PVVD), supplies the three bins at no cost. As needed, PVVD hauls the bins, free of charge, from the high school to the prison. At the prison, inmate laborers sort and bale the material. Since the program "kicked off" on January 5, 1994, nearly three tons of milk and juice boxes have been collected from the prison and school district. The school district has also recycled more than forty cubic yards of

cardboard. All proceeds from the sale of the material go to the prison to fund the recycling program.

To promote the program and encourage kids to participate, Jim visits each school to conduct interactive assemblies.

At the assemblies Jim explains the program and points out the responsibility each person has to the environment and use of the earth's resources. The program is still in its infancy, but with the start of the new school year all schools

Contact Jim Rodkey at (619) 922-6611 for more information about the program.

will be participating.



Located in a World War II vintage airplane hangar in Goleta at the Santa Barbara Airport, the

Imagination Mart Materials Exchange, the facility for the Art From Scrap program, collects and warehouses materials from a huge variety of businesses for use by schools, nonprofit groups, and the community at large.

According to educational visionary Irene Falzone, who founded the program in her garage in 1989,

community involvement
has been the key to the
success of this warehouse of classy discards
and wonderland of creativity.
A mother of three and a
school board member, Irene
first conceived Art from Scrap
while participating in a parentcoop nursery that used a lot of
donated materials.

"I just knew there were all

kinds of materials being discarded that schools could benefit from..." she said, "... and that making things from them could be a great way to teach kids about environmental issues. There was no link for businesses to get rid of materials—or for teachers, who needed them so badly, to access them."

The Imagination Mart bridges an important gap for schools, where art classes have often been eliminated. Teachers can get materials free and workshop space for up to 60 kids. They can come to the site and "turn them loose."

Here's how it works: Program staff take recycled materials into the classroom and show teachers how to integrate environmental education into the existing curriculum. For example, if the class is studying Native Americans, they'll bring toilet paper rolls and bits of leather for making "kachina" dolls and scrap wood for drums. The kids will be invited to the Imagination Mart on a field trip for up to an hour's continuation of how to make learning an art. Art is also used as a medium for teaching more left-brained subjects, like math and science. (If only this "new math" had been available to us right-brained math phobic types when we were young!)

#### **CALMAX's Latest Treasure**

Santa Barbara's IMAGINATION MART by Joyce Mason CALMAX<sup>SM</sup> Coordinator

helps businesses, industries, and institutions find in each other a source for reuse and recycling. Items for trade may include excess products, discards, outdated equipment—anything no longer useful to its current owner. To order a catalog at no cost, contact the California Integrated Waste Management Board, (916) 255-2369.

Some of the best CALMAX<sup>SM</sup> listings are not the "waste not want ads." They are the programs found in those info-packed "back pages" of the CALMAX<sup>SM</sup> catalog. We want to draw your attention to the incredible resources that can be hidden in those tiny descriptions, by highlighting just one of the treasure trove of "Other Reuse Programs."

To bring home these principles, one of Joanie Hollister's favorite teaching techniques with young children is to play "let's pretend we no longer have trash pickup." At the beginning of this exercise, Joanie shows them all their packaging options for carrying apple juice in their lunches: aluminum can, "Squeeze-It," glass bottle, juice box, or powder. At first, the majority opt for the fun, but nonrecyclable, plastic "Squeeze-It." Joanie tells them: "In this new world, only recyclables will be picked up, and everything else has to stay at your home." She elaborates on how many eons some of these materials will REMAIN there. Once it's put that way, the kids get that the recyclable packages are far better, and they learn how an individual choice can make a big difference in everyone's future. To test their learning, kids are later challenged to pack an "environmental" lunch.

As for the older kids: Results of career preference tests, usually given at the end of the 9th grade, show that the largest number of children want to work in the arts, especially Latinos. This is a population that has been a challenge for local educators to reach. Programs like this, however, that tout art as a vehicle for learning,

have opened a whole new world for both teachers and students alike. The second most common career choice is science, so the ability to captivate children on the subject, by combining art and science in ecology, has really worked. Since one or the other is the favorite of most kids, as an approach it can't go wrong.

Art from Scrap keeps the program growing by working constantly with the business community, enlightening them on how their trash bins are full of valuable materials. Executives, owners, and workers are often invited to tour the Imagination Mart warehouse. Later, kids will make items from their exthrowaways. Many a CEO has been known to hang these "objets de scrap" amid more traditional trophies.

Materials exchange works best on all three levels: local, state, and national. The Imagination Mart is like a live, three-dimensional CALMAX<sup>SM</sup> catalog and KidMAX outreach, all rolled into one. CALMAX<sup>5M</sup> salutes innovator Irene Falzone and her staff and supporters for this excellent example of the kind of program we hope to see virtually on every corner in years to come.

For more information about Art from Scrap and the Imagination Mart, call Irene Falzone or Joanie Hollister at (805) 967-1350.

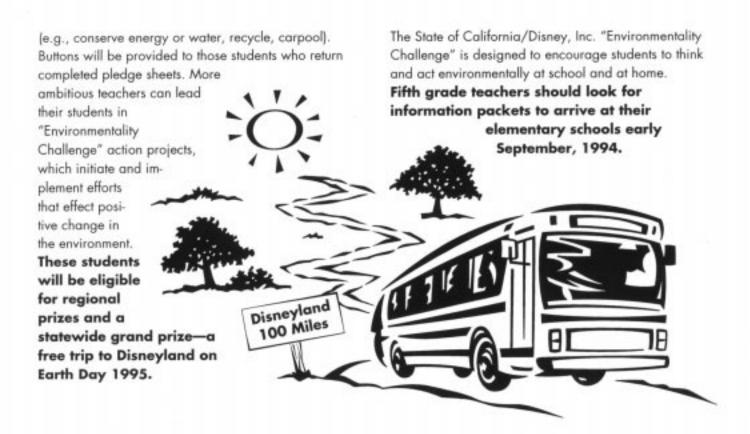
## California Fifth Graders Get "Environmentality!"

"The CIWMB is pleased to be a part of a multi-agency network that promotes coordination of state agency environmental education efforts. This year the California Department of Education formed the California Environmental Education Interagency Network (CEEIN) which provides a forum for state agencies, departments, and commissions to share information, resources, and specific program efforts.

The first major project sponsored by CEEIN is not only a multi-agency effort, it is also a public/private partnership. CEEIN is working with Walt Disney Inc. to develop the "Environmentality Challenge," a school educational program and contest to be introduced this fall to more than 300,000 fifthgrade students throughout California. Resources for instruction will be made available to participating teachers along with pledge sheets, posters and

Jiminy Cricket "Environmentality" buttons.

Fifth-grade teachers can use the teaching materials and pledge sheets to conduct lessons on the environment. Students can then take home the pledge sheets and fill them out with their families, pledging to make some changes in their habits to improve the environment





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